CALIFORNIA ENVIRONMENTAL QUALITY ACT

NEGATIVE DECLARATION

Project Title: Action Memorandum/Remedial Action Plan for Site 6, Former Waste Water Treatment Plan.

State Clearinghouse Number:

Contact Person and Telephone #:

Mr. Leon Bowling
Natural Resources/Environmental Affairs Directorate
Building 1415, MCAGCC, Box 788110
Twentynine Palms, California 92278-8110
Tel: (760) 830-7396 Ext 250

Project Location: Marine Corps Air Ground Combat Center, Twentynine Palms, San Bernardino County

Project Description: The Navy is proposing to conduct a removal action that will satisfy the Remedial Action Plan requirements of the California Health and Safety Code Chapter 6.8. The remedial action plan comprise of removal by excavation and off-site disposal of approximately 6,100 cubic yards of soil contaminated with polychlorinated biphenyl in the form of Arachlor 1254, chlordane, and dieldrin. Sampling of remaining soil will be conducted to determine whether the target level for residual contaminant has already been reached. The total amount of soil to be excavated may change depending on the result of confirmation sampling results. Excavated soil will be analyzed, classified, and disposed in appropriate disposal facilities. Excavated areas will be back filled with certified clean earthen material, and return to its original grade.

Findings of Significant Effect on Environment: DTSC has determined that the proposed project will not have a significant effect on the environment, as defined in Section 21068 of the Public Resources Code. A copy of the CEQA Special Initial Study, which supports this finding, is attached.

Mitigation Measures: None

DTSC Project Manager Signature	Title	Telephone #	Date

DTSC Branch/ Unit Chief Signature	Title	Telephone #	Date

CALIFORNIA ENVIRONMENTAL QUALITY ACT

SPECIAL INITIAL STUDY

The Department of Toxic Substances Control (DTSC) has completed the following Special Initial Study for this project in accordance with the California Environmental Quality Act (§ 21000 et seq., California Public Resources Code) and implementing Guidelines (§15000 et seq., Title 14, California Code of Regulations). This Special Initial Study has also been used to satisfy the requirements of ?711.4, Fish and Game Code and ?753.5, Title 14, Code of California Regulations relating to filing of environmental fees.

I. PROJECT INFORMATION

Project Name: Installation Restoration Site 6, Marine Corps Air Ground Combat Center (MCAGCC), Twentynine Palms - Excavation of soil contaminated with polychlorinated biphenyl (PCB), dieldrin, and chlordane.

Site Location: MCAGCC, Twentynine Palms, South-central San Bernardino County California, 92278. (See Attachment A, Figure 2-1 Attached). Installation Restoration (IR) Site 6 is within a 40-acre residential area located in the southeastern part of the Mainside area in the Marine Palms housing area. The Mainside area is approximately 5 miles north of Twentynine Palms (See Attachment A, Figure 2-2 Attached).

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Project Description: The Navy is proposing to conduct a removal action that will satisfy the Remedial Action Plan requirements of the California Health and Safety Code Chapter 6.8. The remedial action plan comprises removal by excavation and off-site disposal of approximately 6,100 cubic yards (cy) of soil contaminated with polychlorinated biphenyl in the form of Arachlor 1254, chlordane, and dieldrin. Sampling of remaining soil will be conducted to determine whether the residual contaminant target level has already been reached. The total amount of soil to be excavated may change depending on the result of confirmation sampling results. Excavated soil will be analyzed, classified, and disposed in

appropriate disposal facilities. Excavated areas will be back filled with certified clean earthen material, returning the site to its original, uncontaminated grade.

A more detailed project plan description is listed below.

1. Excavation of contaminated soil would be the first activity conducted under the project. Near-surface soil containing PCBs greater than or equal to 1 milligram per kilogram (mg/kg) would be excavated and transported to a waste disposal facility.

   Based on PCB analytical data presented in the Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001, approximately 6,100 cy of soil containing PCB concentrations greater than or equal to 1 mg/kg would be excavated.

2. Following excavation, the soil would be stockpiled on-site and classified according to U.S. EPA publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods). A soil stabilizer would be used to prevent erosion of the stockpiled soil. The stockpiled soil would be disposed of at a Resource Conservation and Recovery Acct (RCRA) hazardous waste facility, a California-hazardous waste facility, and/or a Class III landfill, as appropriate, based on classification of the generated wastes.

   - Earthwork would be planned and conducted to minimize the exposure duration of unprotected soils. Soil erosion would be mitigated with dust control measures and surface runoff control measures during the project. The soil at the site, haul roads, and other areas disturbed by operation would be treated with dust suppressants (i.e., water) as necessary. The use of dust control measures and work practices would prevent the unplanned exposure of any persons to hazardous substances. Trucks hauling excavated soil to off-site disposal locations would be covered to prevent any spread of dust. Surface water/stormwater control measures may include the construction of diversion ditches, benches, and berms.

   - Excavated soil would be stockpiled in lined and bermed stockpile areas prior to off-site disposal as required by the DTSC and Mojave Desert Air Quality Management Board (MAQMD). A soil stabilizer will be used to prevent erosion of the stockpiled soil. If stockpiled soil is classified as a RCRA-hazardous waste, it would be managed according to 40 CFR Section 264.554. State-regulated, non-RCRA hazardous soil would be stockpiled and managed according to the provisions in Health and Safety Code, Chapter 6.5, section 25123.3.

   - Fugitive dust may be generated during the excavation and handling of the contaminated soil. Rules 401 and 403 promulgated by the MDAQMD are

ARARs for these activities. These rules require the use of control measures (e.g., spraying with water) to prevent fugitive dust emissions. In addition, the excavation of near-surface soils with elevated PCB levels (e.g./ 1 mg/kg) would comply with Toxic Substances Control Act (TSCA) as outlined in 40 CFR 761.125.

- Excavation and hauling for off-site disposal will be accomplished using equipment such as the following:

  -20-cubic-yard capacity trucks;
  -backhoes and loaders.

3. The projected start date is April 2003, and the anticipated project duration is approximately twelve weeks.

Site Background: Within MCAGCC Base, Installation Restoration (IR) Site 6 is within a 40-acre residential area located in the southeastern part of the Mainside area in the Marine Palms housing area. To prepare for demolition and replacement of Base housing, a Removal Site Evaluation (RSE) was conducted in 2001. As part of the RSE, soil samples were collected and analyzed for polychlorinated biphenyls (PCBs), total petroleum hydrocarbons (TPH), pesticides, metals, volatile organic compounds (VOCs), and semivolatile organic compounds (SVOCs). PCBs and TPH were distributed throughout the site and randomly detected across the entire site. The most likely source for both compounds is the waste oil use, including PCB-laden transformer oil for dust control during past construction activities. Noteworthy is that Aroclor 1254 was the only PCB mixture identified at IR Site 6 by Battelle in 2001. PCB levels at the Site range from 0 to 8.1 parts per million (ppm).

Additionally, a human health risk assessment was performed as part of the RSE Report prepared by Battelle in 2001. The risk assessment determined potential cancer and noncancer risks to residential receptors who will occupy the site in the future and a site worker who assumed to be involved in site demolition and construction activities. For Superfund-type risk assessments, residential exposure scenarios typically are based on a 30-year exposure duration (6 years as a child and 24 years as an adult). However, the majority of Marine residents are not likely to live in the Base housing for more than 3 years, and the Navy believes that 10 years is a good estimate of the absolute maximum residence duration for anyone living at the site. Given these assumptions, residential risks were calculated for a 3-year exposure scenario and a 10-year exposure scenario.

A summary of the total cancer and noncancer risks for all receptors are provided in Tables 2-4 and 2-5, respectively. (See Attachment A, Tables 2-4 and 2-5.) The total risk values shown on these tables represent the sum of risks from exposure to all soil COPCs and all exposure pathways evaluated in the risk assessment. Risks were calculated based on the 95th percentile concentration

(i.e., 95% of concentration measurements are below the values used to compute risk) of each COPC. Aroclor 1254, is the primary contributor to total cancer and noncancer risk. Dieldrin and chlordane have lower risk than Aroclor 1254 but like Aroclor 1254 each poses a greater cancer risk.

Inorganic lead was evaluated in the risk assessment for IR Site 6. Potential health effects resulting from the concentrations of lead detected at the site were evaluated using the California DTSC Lead Risk Assessment Spreadsheet (version 7.0, 1999). The estimated 99th percentile blood lead level for all residential receptors and the construction/excavation worker, based on the 95th percentile concentration of lead in soil was below the 10 ug/L threshold value recommended by the U.S. EPA (1993). Lead is not considered to be a significant threat at this time.

CERCLA, National Oil and Hazardous Substances Pollution Contingency Plan (NCP), 40 Code of Federal Regulations (CFR) Part 300, and California Health and Safety Code Section 25323 define removal actions as the cleanup or removal of released hazardous substances, actions to monitor the threat of release of hazardous substances, and actions to mitigate or prevent damage to public health or welfare or to the environment. The NCP includes provision for the "removal of drums, barrels, tanks, or other bulk containers that contain or may contain hazardous substances or pollutants or contaminants-where it will reduce the likelihood of spillage; leakage; exposure to humans, animals, or the food chain…" The Department of the Navy (DON) has concluded that of the three alternatives examined, excavation and off-site disposal is the alternative that best meets the NCP criteria of overall protectiveness of human health, compliance with applicable, relevant, and appropriate requirements (ARARs), long-term effectiveness, reduction of mobility, toxicity, or volume through treatment, short-term effectiveness, implementability, cost, and state and community acceptance.

Agencies Having Jurisdiction Over the project/ Types of Permits Required:

DTSC Site Mitigation and Brown Field Program, Office of Military Facilities, Southern California Branch.

II. DISCRETIONARY APPROVAL ACTION BEING CONSIDERED BY DTSC

- ❑ Initial Permit Issuance
- ☑ Removal Action Plan
- ❑ Permit Renewal
- ❑ Removal Action Workplan
- ❑ Permit Modification
- ❑ Interim Removal

- ❑ Closure Plan
- ❑ Other (Specify)
- ❑ Regulations _____

Program/ Region Approving Project: Site Mitigation and Brown Field Program
Office of Military Facilities
Southern California Branch

Contact Person/ Address/ Phone Number: Douglas Bautista
Department of Toxic Substances Control
Office of Military Facilities
Southern California Branch
5796 Corporate Avenue
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(714) 484-5442

III. ENVIRONMENTAL RESOURCES POTENTIALLY AFFECTED

The boxes checked below identify environmental resources which were found in the following ENVIRONMENTAL SETTING/IMPACT ANALYSIS section to be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact".

- ❑ Aesthetics
- ❑ Agricultural Resources
- ❑ Air Quality
- ❑ Biological Resources
- ❑ Cultural Resources
- ❑ Geology And Soils
- ❑ Hazards and Hazardous Materials
- ❑ Hazards and Hazardous Materials
- ❑ Hydrology and Water Quality
- ❑ Land Use and Planning
- ❑ Mineral Resources
- ❑ Noise
- ❑ Population and Housing
- ❑ Public Services
- ❑ Recreation
- ❑ Transportation and Traffic
- ❑ Utilities and Service Systems
- ❑ Cumulative Effects

IV. ENVIRONMENTAL IMPACT ANALYSIS

The following pages provide a brief description of the physical environmental resources that exist within the area affected by the proposed project and an analysis of whether or not those resources will be potentially impacted by the proposed project. Preparation of this section follows guidance provided in DTSC's California Environmental Quality Act Initial Study Workbook [Workbook]. A list of references used to support the following discussion and analysis are contained in Attachment A and are referenced within each section below.

Mitigation measures which are made a part of the project (e.g: permit condition) or which are required under a separate Mitigation Measure Monitoring or Reporting Plan which either avoid or reduce impacts to a level of insignificance are identified in the analysis within each section.

1. Aesthetics

Project activities likely to create an impact:

- The current plan for the site is to demolish and remove all unoccupied, obsolete housing units at the site.

- The removal action will involve heavy construction equipment, such as a backhoes and dump trucks entering and being present at the site throughout the excavation and soil transportation period.

- Excavation of contaminated soils.

Description of Environmental Setting:

The area is currently the location of unoccupied housing units designed for base personnel and their families. As part of the base modernization, the existing housing units will be demolished and replaced with new units. The base modernization is not part of this project.

Analysis of Potential Impacts:

The removal action is intended to reduce the contaminants in the soil at the site to a level that is protective of human health. At the end of the removal action, the disturbed areas will be back filled and return to original grade. The project itself will not change the current use of the site.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
☐ No Impact

2. Agricultural Resources

Project activities likely to create an impact:

None. The removal action will not have any significant agricultural resources impacts. The site is not used for any agricultural purposes.

Description of Environmental Setting:

Currently the site consists of residential buildings, landscaped yards, playgrounds, roadways, and paved parking areas. The buildings are scheduled for demolition and construction of new buildings. The land is not zoned for agricultural use and will not be used for agricultural purposes.

Analysis of Potential Impacts:

Describe to what extent project activities would:

Because the site is used for residential purposes and no agricultural or farming activities occurs at or near the site, the removal action will not:

a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland) as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use.

b. Conflict with existing zoning or agriculture use, or Williamson Act contract.

c. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural uses.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

☐ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☐ Less Than Significant Impact
☑ No Impact

3. Air Quality

Project activities likely to create an impact:

- Excavation of the PCB-contaminated soil has the potential to generate air emissions in the form of fugitive dust and vehicle exhaust from construction equipment.

Description of Environmental Setting:

The climate of MCAGCC Twentynine Palms is typical of an arid upland desert climate with the yearly mean temperature of 68 degrees Fahrenheit. Temperature extremes at the station range from 13 degrees in January to 118 degrees Fahrenheit in July. Relative humidity ranges from 2 percent in the summer to 60 percent in the winter with average annual humidity approximately 29 percent.

Precipitation usually occurs from July to January and averages between three to four inches total per year. The total annual rainfall may be the result of torrential rains in the summer and early autumn and produce flash flooding in the washes and canyons. Snowfall is rare and usually amounts to only one to two inches.

Wind velocities average from three to ten knots with gusts to 45 knots. The winds are extremely variable in direction, but come predominantly from the northwest, west and southwest.

The status of general air quality can be made from data recorded at the city of Twentynine Palms approximately five miles south of MCAGCC by the Mojave Desert Air Quality Management District. Both the California Air Resources Board

and the United States Environmental Protection Agency classify Twentynine Palms as a non-attainment area.

Analysis of Potential Impacts:

Dust is the only expected contributor to degradation in air quality. Earthwork would be planned and conducted to minimize the exposure duration of unprotected soils. Soil erosion would be mitigated with dust control measures and surface runoff control measures for the duration of the project. The soil at the site, haul roads, and other areas disturbed by operations would be treated with dust suppressant (e.g., water) as necessary. Excavations would be stopped during heavy wind periods. The use of dust control measures and work practices would prevent the unplanned exposure of any persons to hazardous substances. Trucks hauling excavated soil to offsite disposal locations would be covered to prevent any spread of dust. Air monitoring will be conducted during excavation and contaminated soil hauling. Workers will be required to wear respiratory protection if particulate matter (PM^2) is exceeded.

Under CERCLA actions, permits are not required as long as they meet the RAP, CEQA, and Public Review/Notice requirements. Therefore, the project will not:

a. Conflict with or obstruct implementation of the applicable air quality plan.

b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

c. Result in cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

d. Expose sensitive receptors to substantial pollutant concentrations.

e. Create objectionable odors affecting a substantial number of people.

In addition, the following are addressed to meet the requirements set forth under Section 711.4, Fish and Game Code and 753.5, Title 14, Code of California Regulations relating to filing of environmental fees:

- Degradation of any air resources which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that air.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ☑ No Impact

4. Biological Resources

Project activities likely to create an impact:

- Excavation and removal activities may have the potential to adversely affect on wildlife habitats.

- Noise generated by trucks hauling soils may disturb some animals.

Description of Environmental Setting:

The primary types of wildlife at MCAGCC Twentynine Palms are rodents, reptiles, and birds. Larger mammals are found on Base only occasionally because of lack of water sites. Some of the more common mammals sighted are the coyote, desert squirrel, jack rabbit, cottontail rabbit, round-tailed ground squirrel, desert kangaroo rat, and desert wood rat. Included among the reptiles are the desert tortoise. sidewinder, Mojave rattlesnake, and desert iguana. Birds include the desert sparrow, red-tailed hawk, kilideer, raven, prairie falcon, roadrunner, screech owl, white-winged dove, and mourning dove. The Department Fish and Game Natural Diversity (Rarefind) Data Base Twentynine Palms Quadrant (October 3, 2002) was reviewed. It was determined that the wildlife living near the site is a sufficient distance away from the site not to be affected by the construction activities.

Lists of state and federal designated or proposed endangered, threatened, or rare plants (as of September 1991) and animals (as of April 1992) have been reviewed to identify species possibly present at MCAGCC Twentynine Palms. Based on information from NREA staff and the Natural Resources Management Plan (Minich 1991), two animals known to be present at the Facility are listed as threatened species. These are the Desert tortoise and Swainson's Hawk. The American Peregrine Falcon has also been identified at the MCAGCC and is listed

as endangered. No listed or proposed plants have been identified at MCAGCC Twentynine Palms.

Approximately one half mile to the west of IR Site 6, across Del Valle Road, stormwater retention ponds have been installed as part of the Best Management Practices Act to control industrial stormwater under the Clean Water Act. The Base has developed these ponds and the surrounding area as a Wildlife Viewing Area. In this area, unlined ponds receive stormwater runoff from various areas of the Base. Theses ponds also serve to receive discharge from sumps installed to collect groundwater pumped from the perched aquifer at IR Site 6 for foundation stabilization. Currently, the retention ponds have standing water year-round and attract wildlife (migratory birds, waterfowl, bats, coyotes, reptiles, rodents, etc.). Small fish are known to exist in the ponds. The areas have been landscaped with drought-tolerant indigenous plants including, mesquite, desert willow, palo verde, saltbush, and other native species. Discharge from the sumps flows into the ponds via a drainage ditch that flows through a culvert under Del Valle Road and on to the ponds. The volume of groundwater discharge from the sumps is approximately 200,000 gallons per week. These ponds also receive stormwater from several other areas on the Base, including as gas station and an auto body shop. In 2001, the RWQCB performed discharge examination from the sumps to the retention ponds and found the discharge to be acceptable. Groundwater samples collected from the monitoring wells near the sump in February 2001 were within levels acceptable to the RWQCB according to Mr. Robert Voorhies.

Analysis of Potential Impacts:

The site consists of residential buildings, landscaped yards, playgrounds, roadways, and paved parking areas. Because the site is located within this developed residential housing area for the Base, the wildlife receptors at the site are limited. The species occurring on IR Site 6 are limited to those commonly associated with human development and occur throughout the Mainside area. Due to project controls, including dust mitigation, application of water, runoff controls, covering of trucks hauling soils, and erosion control measures for stockpiled soils, biological resources will be protected and will not experience impacts as the result of this project.

The only water bodies existing near IR Site 6 are the storm water retention ponds which are about half a mile away.

Describe to what the extent the project would:

a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

The Department Fish and Game Natural Diversity (Rarefind) Data Base was reviewed, and the plants and animals listed in the report are not located on the site but are located in areas a sufficient distance away from the site where they will not be threatened by the site activities.

b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

Please refer to the response to item a.

c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

The site activities will be a sufficient distance from the storm water retention ponds (approximately one half mile) to prevent any substantial adverse affects to the wildlife residing in and near those areas. These are the only water bodies existing near the site.

d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

Please refer to the response in item c.

e. Conflict with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

Please refer to the responses in items a and c. No biological resources will be significantly disturbed. The activities are taking place on a military base.

f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan.

Please refer to the responses in items a and c. No biological resources will be significantly disturbed. The activities are taking place on a military base.

In addition, the following are addressed to meet the requirements set forth under Section 711.4, Fish and Game Code and 753.5, Title 14, Code of California Regulations relating to filing of environmental fees:

Plants:

Please refer to the responses in items a and c for all bulleted items below under the Plants and Animals headings. No biological resources will be significantly disturbed because they are a sufficient distance from the site activities.

- Changes to any riparian land or wetlands under state or federal jurisdiction.
- Changes to soil required to sustain habitat for fish and wildlife.
- Any adverse effect to native and non-native plant life.
- Effects to rare and unique plant life and ecological communities dependent on plant life.
- Any adverse effect to listed threatened and endangered plants.
- Effects on habitat in which listed threatened and endangered plants are believed to reside.
- Effects on species of plants listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder.
- Effects on marine and terrestrial plant species subject to the jurisdiction of the Department of Fish and Game and ecological communities in which they reside.

Animals:

- Effects on listed threatened or endangered animals.
- Effects on habitat in which listed threatened or endangered animals are believed to reside.
- Effects on species of animals listed as protected or identified for special management in the Fish and Game Code, the Public Resources Code, the Water Code, or regulations adopted thereunder.
- Effects on marine and terrestrial animal species subject to the jurisdiction of the Department of Fish and Game and the ecological communities in which they reside.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Department of Fish and Game, Rarefind Natural Diversity Data Base, Twentynine Palms Quadrant, October 3, 2002.

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ☑ No Impact

5. Cultural Resources

Project activities likely to create an impact:

- Excavation and removal of soil.

Description of Environmental Setting:

In 1942, the Army constructed a wastewater treatment facility that occupied approximately 20 acres of the site. The wastewater treatment facility was removed in 1953 in order to construct the housing units that are now being demolished. The balance of the site consists of playgrounds, landscaped yards, roadways, and paved parking areas.

Analysis of Potential Impacts:

Describe to what extent project activities would:

a. Cause a substantial adverse change in the significance of a historical resource as defined in 15064.5.

Please refer to the explanation above for items a., b., and c.

b. Cause a substantial adverse change in the significance of an archeological resource pursuant to 15064.5.

c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

d. Disturb any human remains, including those interred outside of formal cemeteries.

There is little to no likelihood of finding cultural resources at IR Site 6. However, a qualified archaeologist (either base or contractor) will be conducting a site evaluation prior to excavation and will also be present at the site during excavation activities. If resources are discovered in the course of excavation work, work will cease while the evaluation is taking place and a course of action is determined.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
❑ Less Than Significant Impact
☑ No Impact

6. Geology and Soils

Project activities likely to create an impact:

- Excavation and removal of 6,100 of contaminated soils.

Description of Environmental Setting:

The MCAGCC is bounded by two major faults. The Mequite Lake fault is located approximately 1,000 feet west of at the facility, and the West Bullion Mountain fault which is located along the eastern edge of the area.

IR Site 6 is located on Cajon soils derived from alluvial fan materials and are mainly composed of a light brownish-gray fine sand. These soils are well drained and have moderate to high permeability. The Cajon soils are located in a zone corresponding to the occurrence of the alluvial fan and lie between the adjacent lacustrian soils of the playa lake (i.e., Mesquite Lake) and the outcropping quartz

monzonite bedrock of the Bullion Mountains. The Bullion Mountains are the parent material of the alluvial fan/Cajon soils.

Environmental investigations in the Mainside area have encountered fine to medium alluvial fan deposits with sand and some angular cobbles and gravel fragments. Occasional thin gravel lenses or clayey silt and sand lenses also have been encountered during environmental drilling operations. These alluvial deposits interfinger with lacustrine clays that are the predominant lithology near the bottom, or downslope area, of the Mainside area of the Base.

The geologic structure at MCAGCC is dominated by northwestward trending faults which subdivide the regional groundwater basins, Deadman Valley and Twentynine Palms Valley into smaller subbasins. Measurements of water levels on opposite sides of these faults suggest that the faults act as barriers to groundwater flow (Schaefer 1978). Comparison of groundwater elevations indicates a difference of approximately 300 feet between the Surprise Spring subbasin to the west and the Deadman Lake subbasin to the east. Similar changes in groundwater elevations occur across the Mesquite Lake Fault. Several factors may be responsible for impeding groundwater movement across faults, including: 1) offsetting of more permeable beds against less permeable beds; 2) presence of clay fault gauges; 3) local deformation of permeable beds near the fault; and 4) cementation of the fault zone through deposition of minerals from groundwater.

Geophysical and gravity survey data suggest that the basin filling alluvial deposits range in thickness from 2,000 feet in the Surprise Spring Basin to as great as 10,000 feet in the Deadman Lake Basin (Schaefer 1978; Akers 1986).

Analysis of Potential Impacts:

The project consists of soil removal and replacement with clean fill, and it does not involve any development of structures. The project is located in a relatively flat area; consequently, landslides or the creation of unstable soils are unlikely to occur. The clean fill replacement will be graded and compacted pursuant to building standards. Because this site is not crossed by any known active or potentially active faults and all soil removed will be replaced, the project at Site 6 will <u>not</u>:

a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- <u>Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault. (Refer to Division of Mines and Geology Special Publication 42)</u>

- Strong seismic ground shaking
- Seismic-related ground failure, including liquefaction
- Landslides

b. Result in substantial soil erosion or the loss of topsoil.

Please refer to the hazards explanation under section a.

c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of water.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Findings of Significance:

❑ Potentially Significant Impact
☐Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
❑ No Impact

7. Hazards and Hazardous Materials

Project activities likely to create an impact:

- Excavation and transport of contaminated soils.
- Airborne dust from excavated soils.
- Potential risks associated with the project include accidents and injuries to project workers and spills of hazardous materials during the project activities.

Description of Environmental Setting:

Under the project, near-surface soil (0-to 1 foot below ground surface) containing PCBs greater than or equal to 1 mg/kg would be excavated and transported to a waste disposal facility. Based on PCB analytical data presented in the RSE Report, June 29, 2001, approximately 6,100 cubic yards of soil containing PCB concentrations greater than or equal to 1 mg/kg would be excavated.

Following excavation, the soil would be stockpiled on-site and classified according to U.S. EPA publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods). A soil stabilizer would be used to prevent erosion of the stockpiled soil. The stockpiled soil would be disposed of at a Resource Conservation and Recovery Acct (RCRA) hazardous waste facility, a California-hazardous waste facility, and/or a Class III landfill, as appropriate, based on classification of the generated wastes.

The current population of MCAGCC Twentynine Palms is approximately 23,000, of which approximately 11,700 reside in Facility housing or barracks. The current population of the City of Twentynine Palms is approximately 13,000. Based on 1990 census figures, approximately 1,600 people live outside of the Facility, but within four miles of the Mainside sites.

The lands surrounding MCAGCC Twentynine Palms, for at least five miles beyond the Facility boundary, are mostly rural residential areas interspersed with some recreational reserves. The Atchison, Topeka, and Santa Fe Railroad runs along the north border of the Combat Center. Just north and parallel to the railroad lies Interstate Highway 40. The northeast boundary of the Facility is approximately coincident with the Bullion Mountains.

Analysis of Potential Impacts:

a. Create a significant hazard to the public or the environment throughout the routine transport, use, or disposal of hazardous materials.

- Earthwork would be planned and conducted to minimize the exposure duration of unprotected soils. Soil erosion would be mitigated with dust control measures and surface runoff control measures during the project. The soil at the site, haul roads, and other areas disturbed by operation would be treated with dust suppressants (i.e., water) as necessary. The use of dust control measures and work practices would prevent the unplanned exposure of any persons to hazardous substances. Trucks hauling excavated soil to off-site disposal locations would be covered to prevent any spread of dust. Surface water/stormwater control measures may include the construction of diversion ditches, benches, and berms.

- Excavated soil would be stockpiled in lined and bermed stockpile areas prior to off-site disposal as required by the DTSC and Mojave Desert Air Quality Management Board (MAQMD). A soil stabilizer will be used to prevent erosion of the stockpiled soil. If stockpiled soil is classified as a RCRA-hazardous waste, it would be managed according to 40 CFR Section 264.554. State-regulated, non-RCRA hazardous soil would be stockpiled and managed according to the provisions in Division 20, Chapter 6.5, Section 25123.3 of the Ca-HSC.

- Fugitive dust may be generated during the excavation and handling of the contaminated soil. Rules 401 and 403 promulgated by the MDAQMD are considered Applicable and Relevant and Appropriate Requirements (ARARs) for these activities. These rules require the use of control measures (e.g., spraying with water) to prevent fugitive dust emissions. In addition, the excavation of near-surface soils with elevated PCB levels (e.g./ 1 mg/kg) would comply with Toxic Substances Control Act (TSCA) as outlined in 40 CFR 761.125.

- Multiple disposal facilities are available to accept the project wastes.

- Trained personnel will perform construction and site activities. Under conditions of the contract, each person working on the site will have obtained a 40 hour training certificate in accordance with 29CFR 1910.120. The site is secured with a chain-link fence surrounding the perimeter to restrict unauthorized access.

- Due to the project's short duration, approximately 7 weeks, the potential impact to public health and safety is also minimized.

- The Navy will prepare a Health and Safety Plan that conforms with Cal-OSHA and 29CFR 1910.120 health and safety requirements to ensure that construction and site activities will be performed by trained personnel. A site health and safety plan will be developed and implemented during all project phases and will be designed according to the plan listed below.

The Health and Safety Plan (HSP) describes the controls and procedures to be implemented that will minimize the incidents, injury, and health risks associated with the remedial activities conducted at the Site. The HSP will be prepared according to the requirements of 29 CFR 1910.120, and California Code of Regulations (Cal. Code Regs.), title 8 General Industrial Safety Order (GISO) 5192 for work at hazardous waste sites. The HSP will contain, at a minimum, the following elements:

- A hazard evaluation;

- Names of key personnel and the site safety coordinator;
- A statement that personnel have completed training required by 29CFR 1910.120 and Cal. Code Regs. title GISO 5192;
- Medical surveillance requirements and personal protective equipment to be used by site personnel;
- The types and frequency of personal and area air monitoring, instrumentation and sampling techniques for monitoring health and safety;
- Site control measures, including the designation of work zones (e.g., exclusion, contamination-reduction and support zones) and safe work procedures for work near structures or topographic breaks, slopes, wall, etc;
- Management of wastes and decontamination procedures for personnel and equipment;
- Noise and dust control procedures and action levels;
- Site transportation procedures;
- Contingency plans including telephone numbers and contact names; and
- Location and routes to the nearest emergency and non-emergency medical care facilities.

b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

See responses to item a. above.

c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school.

There are no schools located within one-quarter mile of the site.

d. Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to public or the environment.

The MCAGCC, Twentynine Palm is a Calsites listed site. This project will address IR Site 6 and will remove PCB contamination making the site suitable for human habitation. Through project site control measures, such as berms, dust controls, and other means, dust generated during excavation will be prevented from traveling to nearby residents and other habitats. Consequently, there will be no significant hazard to the public or to the environment.

e. Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan.

The Base operates as self-contained unit in most ways. This project will not, however, interfere with local emergency or established Base emergency plans.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
❑ No Impact

8. Hydrology and Water Quality

Project activities likely to create an impact:

- Surface water runoff could be a potential transport mechanism for PCB contamination migration.

Description of Environmental Setting:

The Mainside area at MCAGCC Twentynine Palms is located on the eastern edge of a large tectonic basin. A series of northwest-trending normal and strike-slip faults characterize the basin. The blocks between the faults form individual groundwater subbasins that are partially connected hydraulically across low-permeability materials adjacent to the fault zones. Groundwater levels drop

from west to east across the basin in a series of steps that correspond to the location of these faults. The MCAGCC Mainside area is located in the easternmost subbasin, where groundwater levels are lower than levels in the western subbasins.

The hydrogeology of the Morongo Basin is characterized by unconsolidated deposits of eolian sand, alluvial sands and gravels, and lacustrine silts, clays, and evaporites in playa lakes. The near surface deposits are underlain by older alluvial sand deposits with minor gravel layering. Bedrock in the basin near the MCAGCC is 1,000 to 3,000 ft below ground surface (bgs) and is composed of crystalline igneous and metamorphic rocks. Detailed analyses of the geology and hydrology of the region are presented in Londquist and Martin (1989).

The MCAGCC Mainside installation is bounded by two major faults. The Mesquite Lake fault is located approximately 1,000 ft west of the facility, and the West Bullion Mountain fault is located along the eastern edge of the area. These northwest-trending geologic features are subregional in extent, and the West Bullion Mountain fault defines the eastern limit of the regional groundwater basin.

Environmental investigations in the Mainside area have encountered fine to medium alluvial fan sand deposits with some angular cobbles and gravel fragments. Occasional thin gravel lenses or clayey silt and sand lenses also have been encountered during drilling operations. These alluvial deposits interfinger with lacustrine clays that are the predominant lithology near the bottom, or downslope area, of Mainside. The primary water table beneath the Mainside area, referred to as the Mainside subbasin, generally occurs at 1,547 ft above mean sea level (amsl). Water-level data from the area indicate that the water levels in the Mainside subbasin remain stable throughout the year. Perched groundwater refers to groundwater occurring above the primary aquifer in the Mainside subbasin.

The primary water table beneath the Mainside area, referred to as the Mainside subbasin, generally occurs between 1,546 and 1,547.5 ft above mean sea level (amsl) (land surface elevation in the Mainside area ranges from approximately 1,760 to 1,875 ft amsl). Water levels in this aquifer decrease very slightly from the northwest to the southeast. The gradient of this water table is less than 0.5 ft/mile. Water-level data from the area indicate that the water levels in the Mainside subbasin remain stable throughout the year. Perched groundwater (i.e., groundwater that occurs above the primary aquifer) occurs locally throughout the Mainside subbasin.

Perched groundwater along the southwest boundary of Marine Palms is intercepted by subsurface drains and discharged through sumps to the surface stormwater drainage channel adjacent to Del Valle Road. This water is diverted into a nearby surface water impoundment.

One quarter mile to the west of IR Site 6, across Del Valle Road, stormwater retention ponds have been installed as part of the Best Management Practices Act to control industrial stormwater under the Clean Water Act. The Base has

developed these ponds and the surrounding area as a Wildlife Viewing Area. In this area, unlined ponds receive stormwater runoff from various areas of the Base. These ponds also serve to receive discharge from sumps installed to collect groundwater pumped from the perched aquifer at IR Site 6 for foundation stabilization. Currently, the retention ponds have standing water year-round and attract wildlife (migratory birds, waterfowl, bats, coyotes, reptiles, rodents, etc.). Small fish are known to exist in the ponds. The areas have been landscaped with drought-tolerant indigenous plants including, mesquite, desert willow, palo verde, saltbush, and other native species. Discharge from the sumps flows into the ponds via a drainage ditch that flows through a culvert under Del Valle Road and on to the ponds. The volume of groundwater discharge from the sumps is approximately 200,000 gallons per week. Wildlife using this area could potentially be affected because water from IR Site 6 may reach the ponds. These ponds also receive stormwater from several other areas on the Base, including as gas station and an auto body shop. In 2001, the RWQCB performed discharge examination from the sumps to the retention ponds and found the discharge to be acceptable. Groundwater samples collected from the monitoring wells near the sump in February 2001 were within levels acceptable to the RWQCB according to Mr. Robert Voorhies.

Analysis of Potential Impacts:

a. Violate any water quality standards or waste discharge requirements.

   It is anticipated that the soil removal will not go below approximately one foot below the ground surface. Contaminated soils will be transferred off site to a regulated facility. Because the water table is considerably below the surface, removal of this quantity of soil will not affect water quality standards. Waste discharge requirements will not be affected.

b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficient in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

   Because the water table is considerably below the surface, the project will not deplete groundwater supplies or interfere with the groundwater table level in a manner that would affect land use.

c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site.

Excavated areas will be backfilled with clean soil to prepare the area for construction of new housing units. The area will be returned to its original use state.

d. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site.

See response to item d. above. There are no streams or rivers affected by this project.

e. Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff.

The project will remove a source of potential contamination. There will be no affect on drainage systems because the site will be returned to its original use state.

f. Otherwise substantially degrade water quality.

There will be no substantial effects on water quality resulting from this project.

g. Place within a 100-flood hazard area structures which would impede or redirect flood flows.

The project is not located in a flood flow area.

h. Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

There are no structures which would be exposed flooding damage as a result of the project.

I. Inundation by sieche, tsunami or mudflow.

There is no danger of the above occurrence in this geographical area.

In addition, the following are addressed to meet the requirements set forth under Section 711.4, Fish and Game Code and 753.5, Title 14, Code of California Regulations relating to filing of environmental fees:

- Changes to riparian land, rivers, streams, watercourses and wetlands under state and federal jurisdiction.

- Changes to any water resources which will individually or cumulatively result in a loss of biological diversity among the plants and animals residing in that water.

  There are no water bodies in the area that will be affected by the project.

References:

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Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ❑ Less Than Significant Impact
- ☑ No Impact

9. Land Use and Planning

Project activities likely to create an impact:

None. The removal action will not change the current use of the site. The project will not affect land use or planning outside the project area.

Description of Environmental Setting:

The Mainside area has been developed for multiple uses including housing, recreation, offices, support, medical, training, storage, and maintenance. The immediate areas surrounding IR Site 6 are dedicated to residential housing or support facilities for the housing area (recreation, fast food, commissary, schools, etc.).

The Mainside area of the Base is located approximately 5 miles north of the city of Twentynine Palms, CA, and is separated from the developed area of the nearby community by approximately 2 miles of sparsely populated desert. There are no domestic or industrial uses of groundwater in the vicinity of IR Site 6. The military population of the Base was 7,561 in 1997 and is expected to increase to 9,394 by 2002 (SWDIV, 2001). In 1990 the U.S. Census reported that the total population of the Base was 8,413. The 2000 U.S.

Census reported the population of the City of Twentynine Palms to be 14,764.
.

Analysis of Potential Impacts:

The project activities will not:

a. Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

Land use on the property will not change. Removal of contaminated soils form the site will reduce the hazard risk to people who will live on the site, thereby, the project would allow the property to be consistent with its residential land use designation.

b. Conflict with any applicable habitat conservation plan or natural community conservation plan.

The project is located in a residential setting and will not impact biological resources.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
❑ Less Than Significant Impact
☑ No Impact

10. Mineral Resources

Project activities likely to create an impact:

- Excavation and removal of soil.

Description of Environmental Setting:

- The project will only involve earth moving vehicles and equipment.

Analysis of Potential Impacts:

No effects on natural resources are anticipated during the removal action at site 6. The proposed investigation and removal action will not result in an increased rate of use of natural resources, nor will it result in any substantial depletion of nonrenewable resources. The removal action will not have significant impacts on mineral resources because there will be no deep ground excavation that would disrupt mineral resources. The area is not in a mineral resource area.

Describe to what extent project activities would:

a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.

The project will not require removal of any historic structures or features, and will require only limited subsurface disturbance. Since only minor alteration of the earth surface will occur, potential disturbance or destruction of subsurface archaeological resources is considered remote. Given these considerations, the loss of cultural resources is considered very unlikely. In the event cultural resources are found in the course of the project activities, work will be suspended while a qualified archaeologist makes an assessment of the area and arrangements are made to preserve any resources that are located.

b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
☐ No Impact

11. Noise

Project activities likely to create an impact:

None. Since the existing building will be removed prior to the removal action, there will be no residents present at the site during the removal action.

Analysis of Potential Impacts:

Personnel working on the project will be exposed to short-term noise due to machinery and trucks. This hazard must be evaluated and provisions made to provide site personnel with hearing protection devices if 8-hour average noise levels may exceed 85 decibels (dBA), or peak impact noise levels may exceed 140 dBA. Workers on the project will use personal protective equipment, such as earplugs or other hearing protection. The Navy will prepare a health and safety plan pursuant to the Code of Federal Regulations, title 29, section 1910.120 and California Code of Regulations, title 8, section 5192, to maintain workers exposure within acceptable noise levels.

Therefore, the project will not result in:

a. Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies.

b. Exposure of persons to or generation of excessive groundbourne vibration or groundbourne noise levels.

c. A substantial permanent increase in ambient noise levels in the vicinity above levels existing without the project.

d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
❑ No Impact

12. Population and Housing

Project activities likely to create an impact:

- The removal action will involve heavy construction equipment, such as a backhoe and dump truck entering the site during the excavation period.

- The current plan for the site is to remove all existing housing units that are old and have been determined inadequate and build modern replacement units at the site.

Description of Environmental Setting:

The project will not alter the use of the site nor result in additional residents at the site. Therefore the project will not:

a. Induce substantial population growth in area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated

☑ Less Than Significant Impact
❑ No Impact

13. Public Services

Project activities likely to create an impact:

The removal action will not have significant impacts on public services, because no additional public services are required.

Description of Environmental Setting:

The entire base is under Marine Corps control, which provides its own public safety services

Analysis of Potential Impacts:

Agencies that may provide emergency response, such as the Twentynine Palms city fire and police departments, will be notified in advance of the project activities and the associated hazards. The agencies will acknowledge in writing that they have been briefed; a copy of the acknowledgement will be retained on-site. In the event of an onsite fire or medical emergency, fire suppression and ambulance transfer to local hospital will be available. Existing service levels would not be substantially impacted.

Efforts will be made to prevent the creation of excessive information demands on local emergency service agencies. Every effort will be made to inform the public the start of the project, its progress and the appropriate DTSC staff to contact for information or complaints regarding the excavation or any transportation activity. This will avoid excessive use of the City's emergency response capability and 911 reporting system for non-emergency public concerns.

Therefore, the project will not:

a. Result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

- Fire protection
- Police protection
- Schools

- Parks
- Other public facilities

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
☐ No Impact

14. Recreation

Project activities likely to create an impact:

- The site will remain closed to the public during the remediation activities.

Description of Environmental Setting:

The base is an active military base and is not open to the public.

Analysis of Potential Impacts:

The project will not result in the opening of the base for public access nor will it result in additional population at the base, therefore the project will not:

a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

b. Include recreational facilities or require construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ☑ Less Than Significant Impact
- ❑ No Impact

15. Transportation and Traffic

Project activities likely to create an impact:

- Construction vehicles entering and leaving the site will have temporary effects on Highway 62 traffic within the vicinity of the Camp.

- Trucks hauling excavated soils away from the site will have slight impact on Highway 62.

Description of Environmental Setting:

The primary point of access to the Camp is the Adobe Road which is directly connected to Highway 62. It is estimated that approximately 305 truckloads of soil would be hauled off site. It is estimated that approximately four personnel vehicles would be used for project contractors.

The route from the Base to the disposal facility will be from Adobe Road to freeway 62.

Analysis of Potential Impacts:

The project would not require heavy equipment larger than the 20-cubic yard capacity trucks for hauling excavated soil and the backhoes and loaders for excavation. All vehicles when not in use would be parked on site. The project is expected to move between 10 and 20 truckloads of soil per day. Truck and other vehicle trips would be timed to avoid peak traffic hours. Traffic in the area is light to moderate; varying with peak morning and evening commuting times and also varying due to scheduled training activities at the Base. Therefore, the project will not:

a. Cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections).

b. Exceed, either individually or cumulatively, a level of service standard established by the country congestion management agency for designated roads or highway.

c. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

d. Result in inadequate emergency access.

e. Result in inadequate parking capacity.

f. Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

References:

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Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ☑ Less Than Significant Impact
- ❑ No Impact

16. Utilities and Service Systems

Project activities likely to create an impact:

None. Energy used at the facility is supplied by Southern California Edison on a commercial demand basis.

Description of Environmental Setting:

This project does not involve, address, nor result in the need for substantial amounts of energy. The project will only involve short duration field activities. This will be the only period during which energy usage will occur. All vehicles are self-contained and will run on diesel and/or gasoline. Based on the relatively small size of the project, the anticipated increased usage of natural resources will be irretrievable but insignificant.

Temporary mobile offices, portable toilets and storage facilities will be used by the at the site. Communications will be via a combination of radios and cell phones.

Any solid waste material (drinking water bottles, food containers, or other material) and food scraps generated during the removal action will be stored in plastic bags and disposed as trash. Excavated soils will be stockpiled and profiled according to hazardous waste characterization procedures and properly disposed. Earthwork would be planned and conducted to minimize the exposure duration of unprotected soils. Soil erosion would be mitigated with dust control measures and surface runoff control measures during the project. Surface water/storm water control measures may include the construction of diversion ditches, benches, and berms.

Therefore, this project will <u>not</u>:

a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

e. Result in determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the projects projected demand in addition to the providers existing commitments.

f. Be served by a landfill with sufficient permitted capacity to accommodate the projects solid waste disposal needs.

h. Comply with federal, state, and local statutes and regulations related to solid waste.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

☐ Potentially Significant Impact
❑ Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
❑ No Impact

17. Cumulative Effects

Project activities likely to create an impact:

- Removal of PCB-contaminated soil.

Description of Environmental Setting:

The use or disposal of PCBs is not known or documented for IR Site 6. The nature and distribution, as well as prior common usage of PCBs are widely and randomly spread across the area of concern. The most likely source of these compounds was waste oil used for dust control. Formerly, surface application of waste oil was common to prevent windblown dust. Prior to the late 1970s, PCB-laden transformer oil could have been mixed with the waste oil prior to spreading. It is important to note that only one PCB compound, Aroclor 1254, is present at the site. This may be due to a limited time frame when dust suppressant was applied.

Wastewater evaporation ponds were constructed in 1942 and abandoned in 1945. The Marine Palms housing area was constructed following destruction of the ponds in 1953 when the Base was reactivated by the Marine Corps. Dust suppressant application was likely to have occurred during housing construction and prior to lawn seeding for grass. However, there appears not to be a correlation between the occurrence of the Aroclor 1254 with the footprint of the former evaporation ponds that would suggest another source for these

compounds. Higher PCB occurrence in the surface samples suggests a surficial release of the compound.

The demolition of the old, unoccupied buildings and construction of the new ones will not be conducted concurrently with the removal action. Removal action will only commence after the old buildings have been removed and construction of new replacement buildings will only start after the removal action is completed.

Analysis of Potential Impacts:

Excavation with off-site disposal is a mature remedial technology. Surface soil removal would be easily accomplished with conventional, readily available equipment and contractors. Also, multiple disposal facilities are available to accept the wastes existing at the site.

In the long-term, excavation and off-site disposal would be effective because such a removal would reduce the human health risk, reduce the mobility of the contaminants in the environment, and allow for unrestricted property use. In the short-term, excavation and off-site disposal would be effective because engineering controls would be used so that the excavation, transport, and disposal of the wastes would not present substantive risks to site workers or the public. In addition, cleanup levels would be achieved in a short time frame to allow for unrestricted property use. For IR Site 6, the term unrestricted implies the use of the land for residential purposes.

Therefore the project will not result in:

a. Increase the need for developing new technologies, especially for managing any hazardous or non-hazardous wastes that the project generates.

b. Increase the need for developing new technologies for any other aspects of the projects.

c. Leads to a larger project or leads to a series of projects, or is a step to additional projects. Examples of DTSC projects include Interim Corrective Measures and Removal Actions that are not final remedies for a site or facility.

d. Alters the location, distribution, density or growth rate of the human population of an area.

e. Affect existing housing, public services, public infrastructure, or creates demands for additional housing.

f. Be cumulatively considerable on the environments with cumulative adverse effects on air, water, habitats, natural resources, etc.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

- ❑ Potentially Significant Impact
- ❑ Potentially Significant Unless Mitigated
- ☑ Less Than Significant Impact
- ❑ No Impact

18. Mandatory Findings of Significance

Project activities likely to create an impact:

None. The removal action at IR Site 6 will not have overall significant impact.

Description of Environmental Setting:

The MCAGCC is an active military installation located in south central San Bernardino County, California (Attachment A, Figure 1-1). The Base covers approximately 932 square miles of remote desert and is used primarily for live-fire training exercises. The Mainside area is located in the southern section of the base, approximately 5 miles north of the city of Twentynine Palms. The Mainside area contains the majority of the infrastructure of the Base and covers approximately 3,500 acres. IR Site 6 is a 40-acre residential area located in the southeastern part of the MCAGCC Mainside area in the Marine Palms Housing (Attachment A, Figure 1-2).

Analysis of Potential Impacts:

DTSC has determined that this project will not have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly. Please also refer to the discussion above in and in the Site Background statement on pages 2 and 3 which includes the conclusions of the health risk assessment. Also, based on the conclusions stated in the biological, geological, hydrology, and hazards and hazardous materials sections of this

Initial Study, there is no possibility of a significant environmental effect from this project.

a. Have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory.

   The Biological Resources and Cultural Resources sections of this Special Initial Study support the finding that this project will not have a significant adverse affect on human beings, the environment, fish, and/or wildlife.

b. Have impacts that are individually limited but cumulatively considerable. As used in the subsection, "cumulatively considerable".

   ["Cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects]

   The Cumulative Effects section of this Special Initial Study supports the finding that this project will not have adverse effects in connection with past or future projects. The project will benefit the environment and those who reside in it by removing harmful contaminants.

c. Have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly.

   Please refer to the response in item c. above and the Hazards and Hazardous Materials sections of this Special Initial Study. The project will benefit the environment and those who reside in it by removing harmful contaminants.

References:

Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, June 29, 2001.

Findings of Significance:

❑ Potentially Significant Impact
☐ Potentially Significant Unless Mitigated
☑ Less Than Significant Impact
☐ No Impact

V. DETERMINATION OF DE MINIMIS IMPACT FINDING

On the basis of this Special Initial Study:

☑ I find that there is no evidence before the Department of Toxic Substances Control that the proposed project will have a potential for an adverse effect on wildlife resources or the habitat upon which the wildlife depend. A Negative Declaration with a De Minimis Impact Finding will be prepared.

VI. DETERMINATION OF APPROPRIATE ENVIRONMENTAL DOCUMENT

On the basis of this Special Initial Study:

☑ I find that the proposed project COULD NOT have a significant effect on the environment. A NEGATIVE DECLARATION will be prepared.

❑ I find that although the proposed project COULD HAVE a significant effect on the environment, mitigation measures have been added to the project which would reduce these effects to less than significant levels. A NEGATIVE DECLARATION will be prepared.

❑ I find that the proposed project COULD HAVE a significant effect on the environment. An ENVIRONMENTAL IMPACT REPORT will be prepared.

DTSC Project Manager Signature	Title	Telephone #	Date
Douglas Bautista	RPM	(714) 484-5442	

DTSC Branch/ Unit Chief Signature	Title	Telephone #	Date
John E. Scandura	Branch Chief	(714)484-5456	

ATTACHMENT A

SPECIAL
INITIAL STUDY
FIGURES AND TABLES LIST
for
INSTALLATION RESTORATION SITE 6
MARINE CORPS AIR GROUND COMBAT CENTER
TWENTYNINE PALMS

LIST OF FIGURES

LIST OF TABLES

ATTACHMENT B

SPECIAL
INITIAL STUDY
REFERENCE LIST
for
INSTALLATION RESTORATION SITE 6
MARINE CORPS AIR GROUND COMBAT CENTER
TWENTYNINE PALMS

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1. Draft Final Engineering Evaluation/Cost Analysis for Installation Restoration Site 6, Marine Corps Air Ground Combat Center, Twentynine Palms, California, Battelle, May 3, 2002.

2. Removal Site Evaluation Report (RSE) for Installation Restoration Site 6, Marine Corps Air Ground Com bat Center, Twentynine Palms, California, June 29, 2001.

3. Department of Fish and Game, Rarefind Natural Diversity Data Base, Twentynine Palms Quadrant, October 3, 2002.

FIGURE 2-1

LOCATION OF
MARINE CORPS AIR GROUND COMBAT CENTER

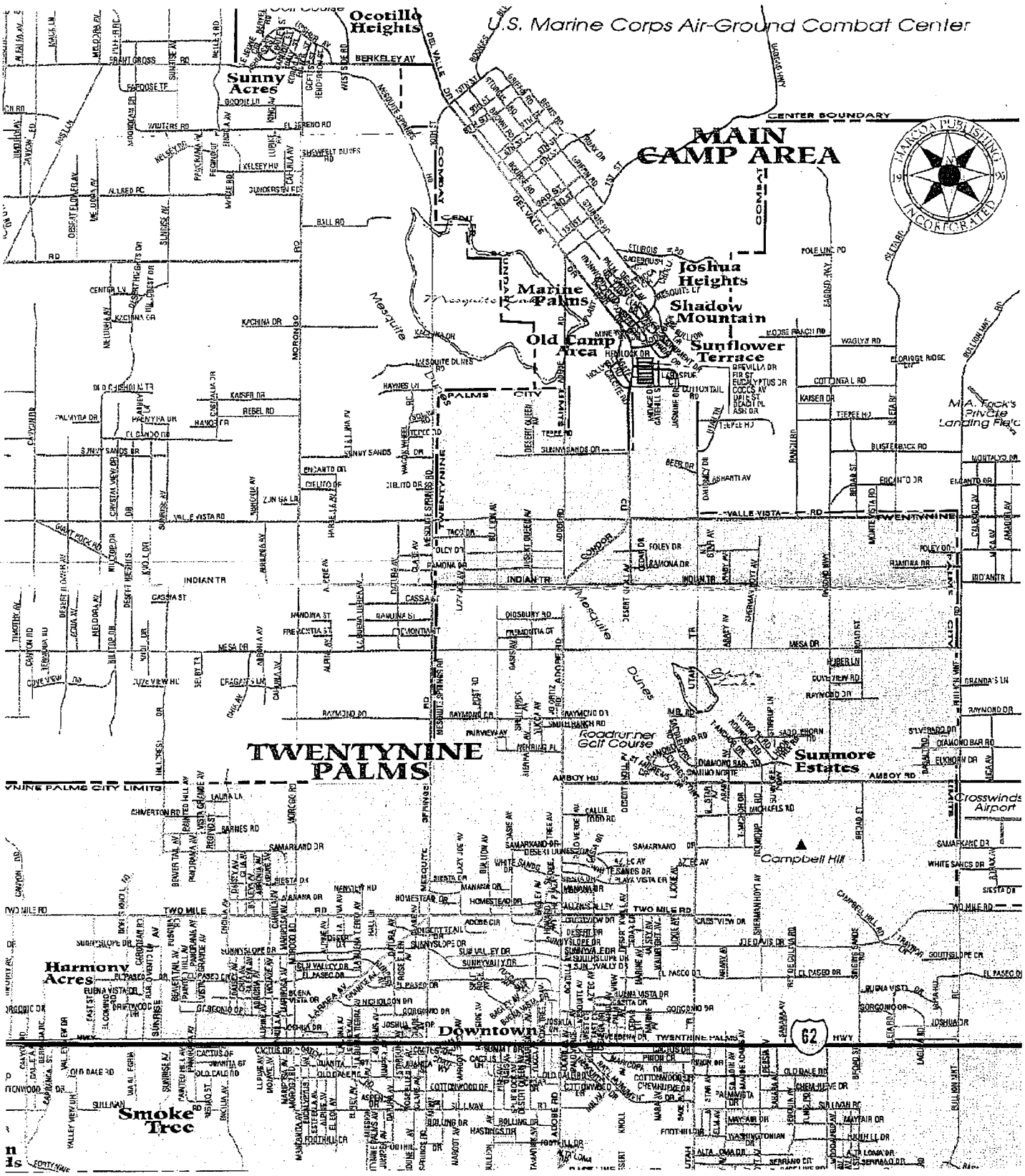

FIGURE 2-1
LOCATION OF
MARINE CORPS AIR GROUND COMBAT CENTER

FIGURE 2-2

LOCATION OF MCAGCC IR SITE 6
INSTALLATION RESTORATION SITE 6

MARINE CORPS AIR GROUND COMBAT CENTER,
TWENTYNINE PALMS

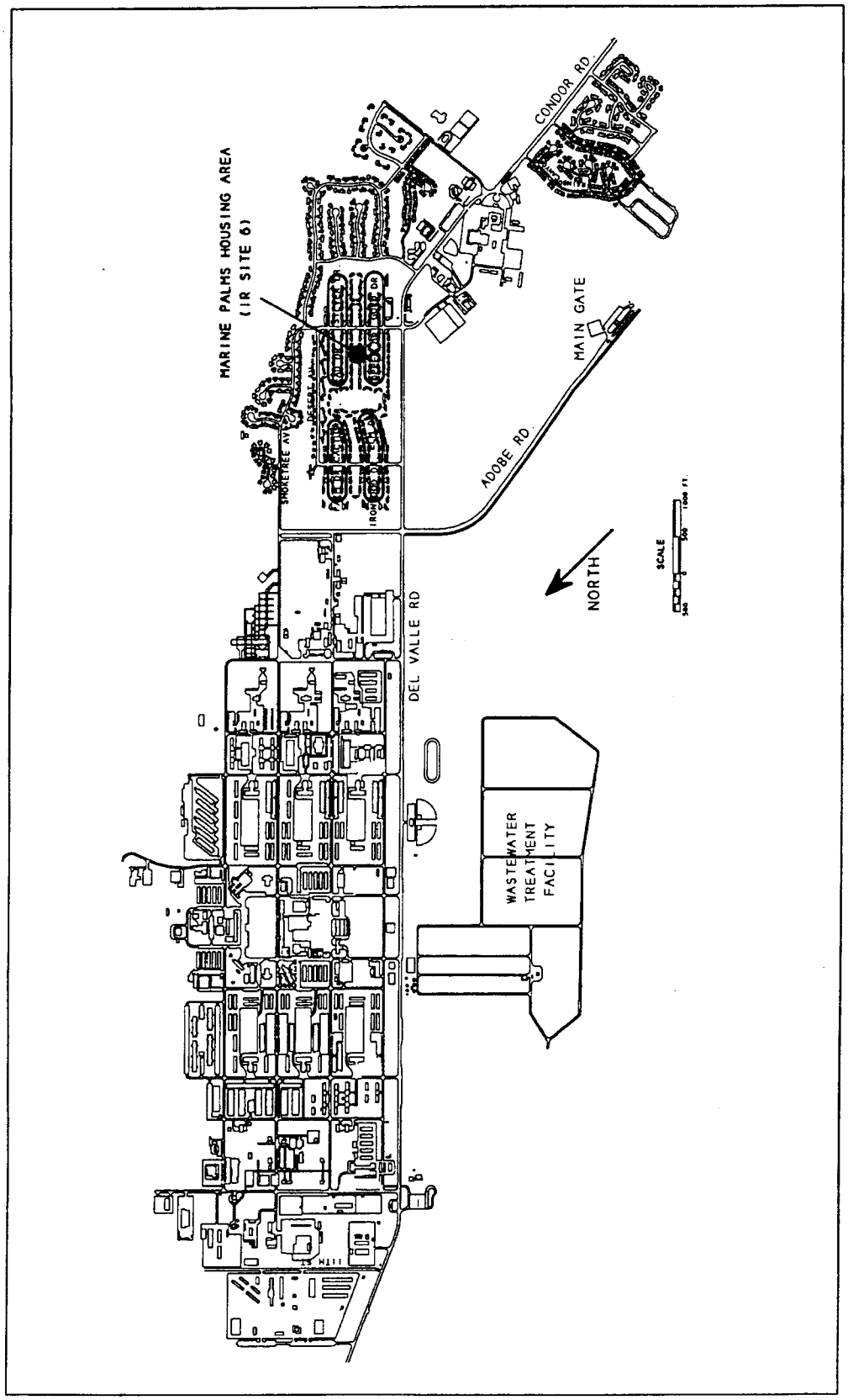

Figure 2-2. Location of MCAGCC IR Site 6

TABLE 2-4

SUMMARY OF TOTAL CANCER RISKS BASED ON THE 95TH PERCENTILE CONCENTRATIONS IN SOIL

INSTALLATION RESTORATION SITE 6, MARINE CORPS AIR GROUND COMBAT CENTER, TWENTYNINE PALMS

TABLE 2-5

SUMMARY OF TOTAL NONCANCER HAZARDS BASED ON THE 95TH PERCENTILE CONCENTRATIONS IN SOIL

INSTALLATION RESTORATION SITE 6
MARINE CORPS AIR GROUND COMBAT CENTER, TWENTYNINE PALMS

Table 2-4. Summary of Total Cancer Risks Based on the 95th Percentile Concentrations in Soil

Receptors	Office of Environmental Health Hazard Assessment (OEHHA) Toxicity Values				U.S. EPA Toxicity Values			
	Ingestion	Dermal Contact	Inhalation	Total	Ingestion	Dermal Contact	Inhalation	Total
Adult (10 years)	8.2E-07	5.1E-06	3.4E-08	6.0E-06	6.8E-07	4.9E-06	1.8E-08	5.6E-06
Adult (3 years)	2.5E-07	1.5E-06	1.0E-08	1.8E-06	2.1E-07	1.5E-06	5.3E-09	1.7E-06
Child (10 years)	5.0E-06	1.8E-06	5.2E-08	6.8E-06	4.1E-06	1.7E-06	2.7E-08	5.9E-06
Child (3 years)	2.3E-06	6.9E-07	2.4E-08	3.0E-06	1.9E-06	6.6E-07	1.3E-08	2.6E-06
Full Time Occupational Worker (25 years)	7.3E-07	1.0E-06	2.0E-08	1.8E-06	6.1E-07	9.9E-07	1.1E-08	1.6E-06
Construction/Excavation Worker (1 year)	2.0E-07	5.3E-08	5.8E-10	2.6E-07	1.7E-07	5.0E-08	3.0E-10	2.2E-07

Table 2-5. Summary of Total Noncancer Hazards Based on the 95th Percentile Concentrations in Soil

Receptors	Ingestion	Dermal Contact	Inhalation	Total
Adult (10 years)	1.2E-01	6.8E-01	2.2E-03	8.0E-01
Adult (3 years)	1.2E-01	6.8E-01	2.2E-03	8.0E-01
Child (10 years)	7.1E-01	2.4E-01	3.3E-03	9.5E-01
Child (3 years)	1.1E+00	3.1E-01	5.1E-03	1.4E+00
Full Time Occupational Worker (25 years)	4.2E-02	5.5E-02	5.2E-04	9.8E-02
Construction/Excavation Worker (1 year)	2.9E-01	7.0E-02	3.7E-04	3.6E-01